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International Patent Application
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"Hood for protective garment"

Amended Claims 1 to 20
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(English Translation)

Amended claims:

1. A hood (1), in particular for a clothing item (2), preferably for protective and/or military purposes, such as an NBC protective suit or the like, the hood (1) comprising a circumferential (peripheral) elastic hem (3) to form a face opening (4), the face opening (4) being provided to receive a respirator (5) and the hem (3) abutting the respirator (5) in the use state,
characterized in
that the side of hem (3) that faces into the face opening (4) is provided with a multiplicity of circumferential sealing elements (6) which are durably conjoined with the hem (3) and are in the form of elastofibers for closeout abutment of the respirator (5).
2. The hood according to claim 1 which is characterized in that the sealing elements (6) abut the respirator (5) at least essentially linearly, and/or in that the sealing elements (6) project and/or protrude from the hem (3).
3. The hood according to claim 1 or 2 which is characterized in that the sealing elements (6) are secured to the hem (3) by stitching, interweaving, adhering, stapling, welding or the like.
4. The hood according to any one of the preceding claims which is characterized in that the sealing elements (6) are configured as a sealing ring, as a sealing lip or as a sealing protrusion.
5. The hood according to any one of the preceding claims which is characterized in that the sealing elements (6) are thread, ligament, string or strip shaped and/or webbed and/or honeycomb shaped.

6. The hood according to any one of the preceding claims which is characterized in that the individual sealing elements (6) are in an at least essentially parallel arrangement and/or in that the individual sealing elements (6) form a honeycombl like construction.
7. The hood according to any one of the preceding claims which is characterized in that the elasticity of the sealing elements (6) corresponds at least essentially to the elasticity of the hem (3).
8. The hood according to any one of the preceding claims which is characterized in that the cross-sectional thickness d of the sealing elements (6) is not less than $1/4$, in particular not less than $1/3$, preferably not less than $2/3$ and more preferably not less than $3/4$ of the cross-sectional thickness D of the hem (3), and/or the sealing elements (6) project and/or protrude from the hem (3) by not less than 0.1 mm, in particular not less than 0.25 mm, preferably not less than 0.4 mm, more preferably not less than 0.6 mm and even more preferably to an extent of 1 mm or more.
9. The hood according to any one of the preceding claims which is characterized in that the sealing elements (6) have a relative elastic extensibility, based on their original length, of not less than 20%, in particular not less than 30%, preferably not less than 50%, more preferably not less than 70% and even more preferably not less than 85% or more, and/or in that the material of which the sealing elements (6) consist has a 25°C modulus of elasticity in stretching which is not more than $10^8 \text{ N}\cdot\text{m}^{-2}$, in particular not more than $10^7 \text{ N}\cdot\text{m}^{-2}$, preferably not more than $5\cdot 10^6 \text{ N}\cdot\text{m}^{-2}$, and

is preferably in the range from $5 \cdot 10^5 \text{ N} \cdot \text{m}^{-2}$ to $9 \cdot 10^6 \text{ N} \cdot \text{m}^{-2}$.

10. The hood according to any one of the preceding
5 claims which is characterized in that the hood (1)
including the face opening (4) comprises, in particular on the side portion of face opening (4), a fastener (7), in particular in the form of a touch and close fastener or zip fastener, and/or in that
10 the hood (1) is detachable from the rest of clothing item (2).
11. The hood according to any one of the preceding
15 claims which is characterized in that the hood (1)
is fully or partially lined on its inside surface with an inside material, the inside material comprising an adsorption-capable material, in particular activated carbon, preferably in the form of activated carbon granules or spherules and/or
20 activated carbon fibers, and/or a water vapor pervious, at least essentially gas and/or air impervious barrier layer which prevents or at least retards the passage of harmful gases or liquids, in particular chemical warfare agents.
- 25 12. The hood according to any one of the preceding claims which is characterized in that the hood (1) comprises at least one loop, tab or the like (8) above the face opening (4).
- 30 13. A clothing item (2), preferably for protective and/or military purposes, such as an NBC protective suit or the like, comprising a hood (1) according to any one of the preceding claims.
- 35 14. The clothing item according to claim 13 which is characterized in that the hood (1) is durably joined to the rest of clothing item (2), in par-

5 ticular by stitching, interweaving, adhering, stapling or the like, or in that the hood (1) and the rest of clothing item (2) form a one-piece construction, or in that the hood (1) is detachable from the rest of clothing item (2), in particular by means of a zip fastener or of a touch and close fastener.

10 15. The clothing item according to claim 13 or 14 which is characterized in that the clothing item (2) is fully or partially lined on its inside surface with an inside material, the inside material comprising an adsorption-capable material, in particular activated carbon, preferably in the form of activated carbon granules or spherules and/or activated carbon fibers, and/or a water vapor pervious, at least essentially gas and/or air impervious barrier layer which prevents or at least retards the passage of harmful gases or liquids, in particular chemical warfare agents.

25 16. A clothing item (2), in particular for protective and/or military purposes, such as an NBC protective suit or the like, the clothing item (2) comprising at least one opening (4) for a body part, such as a hand, arm, foot, leg or head, having a circumferential elastic hem (3) to form this opening (4), the opening (4) being provided to receive a further clothing item in particular having a smooth surface texture and/or to receive an outfit article (5) and the hem (3) abutting the further clothing item and/or the outfit article in the use state,

characterized in

35 that the side of the hem that faces the further clothing item and/or the outfit article (5), preferably the side of hem (3) which faces into the

opening (4), is provided with a multiplicity of circumferential sealing elements (6) which are durably conjoined with the hem (3) and are in the form of elastofibers for closeout abutment of the further clothing item and/or outfit article (5).

17. The clothing item according to claim 16 which is characterized by the features of the characterizing portion of one or more of claims 1 to 15.

18. The use of an elastic hem (3) for closing out the transition between a portion of a clothing item (2), in particular a hood (1), on the one hand and a further clothing item and/or outfit article (5), in particular a respirator, on the other,

characterized in

that the side of hem (3) that faces the further clothing item and/or the outfit article (5) is provided with a multiplicity of circumferential sealing elements (6) which are durably conjoined with the hem (3) and are in the form of elastofibers for closeout abutment of the further clothing item and/or outfit article (equipment article) (5).

19. The use according to claim 18 for closing out the transition of a hood (1) of a clothing item (2), preferably for protective and/or military purposes, such as an NBC protective suit or the like, and of a respirator (5).

20. The use according to claim 18 or 19 which is characterized by features of the characterizing portion of one or more of claims 1 to 15.